**GREENAWAY** et al Serial No. **10/049,845** March 24, 2003

## IN THE CLAIMS

Please amend claims 1 and 7-10 and add newly written claims 11-13 as follows.

Please substitute the following amended claim(s) for corresponding claim(s) previously presented. A copy of the amended claim(s) showing current revisions is attached.

1. (*Currently Amended*) An apparatus for focussing images from a plurality of object planes, said object planes at least partially separated along a first optical axis, onto a plurality of detectors, said detectors at least partially separated transversely with respect to a second optical axis, said apparatus comprising:

an optical system including a diffraction grating for acting upon incident light from said plurality of object planes to produce a plurality of diffraction orders of light; and

a plurality of ancillary optical modules, each module focussing one of said plurality of diffraction orders of light on a corresponding one of said plurality of transversely separated detectors.

7. (*Currently Amended*) An apparatus according to claim 1 whereby the diffraction grating is comprised of an amplitude-only diffraction grating, a phase only diffraction grating and a phase and amplitude diffraction grating and said grating is one of a reflective and a transmissive grating.

March 24, 2003

8. (*Currently Amended*) An apparatus according to claim 1 whereby the grating is one of a two-level (binary), a multi-level (digitised) and a continuous-level (analogue) structure.

9. (*Currently Amended*) The apparatus of claim l where each object plane contains an array of elements, capable of existing in at least two states and in which the detector is capable of distinguishing between said states.

B) Cord 10. (*Currently Amended*) An apparatus for reading data from a three dimensional optical storage medium wherein object planes are located within the medium comprising an apparatus according to claim 9 wherein the detector is adapted to produce a signal dependent on the state of the elements.

-- 11. (*New*) An apparatus according to claim 1, wherein said first and second optical axes are coincident.

- 12. (New) An apparatus according to claim 1, wherein said diffraction grating includes grating lines.
- 13. (*New*) An apparatus according to claim 12, wherein the grating lines are not plane parallel.--